Catalogue of American Amphibians and Reptiles.

Glorioso, B.M. 2010. *Pseudacris ornata*.

Pseudacris ornata (Holbrook)
Ornate Chorus Frog

Rana ornata Holbrook 1836:97. Type-locality, "…only in South Carolina…about four miles from Charleston, between the Cooper and Ashley rivers…[Charleston County, South Carolina]". Holotype not designated; figured in Holbrook (1836, plate 16).
Cystignathus ornatus: Holbrook 1842:103.
C(horophilus) ornatus: Le Conte 1855:428.
Chorophilus ocularis: Cope 1875:30.
Chorophilus copii: Boulenger 1882:334.
Chorophilus occidentalis: Cope 1889:335
Hyla copii: Gunther 1901:266.
Pseudacris occidentalis: Stejneger and Barbour 1917:30.
Pseudacris ornata: Stejneger and Barbour 1917:31.
P(seudacris) copii: Noble 1923:1.
Hyla occidentalis: Noble 1923:5. By implication.
Hyla ornata: Noble 1923:5. By implication.
Hyla weberi: Noble 1923:5. Replacement name for *Chorophilus copii* Boulenger 1882.
Hyla (Pseudacris) ornata: Dubois 1984:85.

• **CONTENT.** No subspecies are recognized.

• **DEFINITION.** The following has been adapted from Brown (1956). This small, but stout, hylid frog has a known maximum length of ca. 40 mm. The head is relatively small with a pointed snout, bearing a dark triangular mark between the eyes, with a posteriorly directed apex. This marking may be faint or entirely absent in some individuals. The nostrils lie nearly equidistant from the eye to the tip of the snout and are placed on a slight prominence. The tympanum is small and darkly colored. Extending from the tip of the snout, through the nostril, and to the eye is a thin, dark stripe. This stripe broadens posterior to the eye, enclosing the tympanum, and extends backward to the arm. Beyond the arm, on the sides of the body, is a single broad stripe extending about halfway to the groin. This stripe will sometimes be replaced by a series of 1 to 3 spots, the first of which is usually elongate. Dorsally, 2 longitudinal stripes may extend from just past the tympanum to the groin on both sides of the midline. In many instances these stripes may be broken or completely absent. The anterior surface of the upper arm contains a dark line, which extends onto the body for a short distance. Two thin bars are usually present on the forearm. The upper surface of the hind leg is light brown with typically 2 dark bars on the thigh and 3 on the lower leg. The lower half of the rear of the thigh is reticulate, with dark lines enclosing small yellow spots. The edge of the upper lip is black or dark brown, above which is a yellowish-white line from the tip of the snout to the arm, being broadest just under or anterior to the eye. The edge of the lower lip has large white spots with thin black bars between them. The ground coloration of this frog is extremely variable, but is predominantly gray, brown, reddish-brown, pinkish, or green. Some may even be nearly black. In juveniles, the details of pattern are not clearly demarcated. The venter is whitish, and the dorsal skin is smooth. The tips of digits are somewhat rounded, but not obviously expanded. Only a trace of webbing is present between the third and fourth toe.

Tadpoles exhibit lateral eyes and the body is reddish-brown with light dorsolateral lines extending from the snout along the length of the body (Gregoire 2005). The belly is light in color and the throat is clear. The tail exhibits a highly arched dorsal fin, which extends well onto the body, terminating dorsally near the eyes. Small tadpoles have darker markings on the dorsal tail muscle than the ventral, but this bi-coloration becomes more uniformly pigmented as they grow larger. The labial tooth row formula is 2(2)/3[1] (Altig 1971).

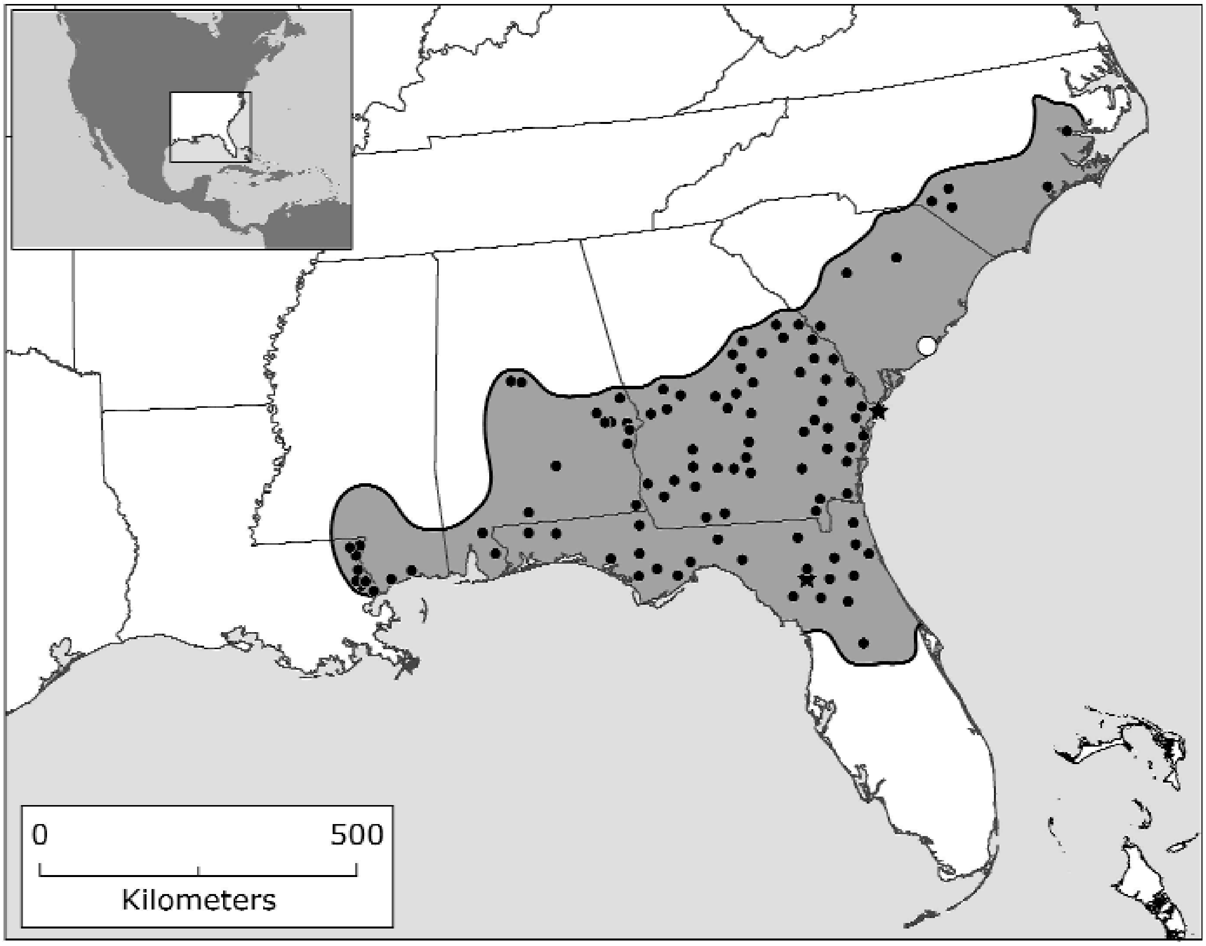


FIGURE 1. Two adult *Pseudacris ornata*, a reddish-brown phase (left) and a green phase (right), from Okaloosa County, Florida (photograph by John Jensen).



FIGURE 2. A *Pseudacris ornata* tadpole from Evans County, Georgia (photograph by Dirk Stevenson).

• **DESCRIPTIONS.** Detailed descriptions of general morphology, coloration, and/or natural history appear in Altig (1971), Brown (1956), Deckert (1915), Harper (1931), Jensen (2008), Siekmann (1949), Wright (1932), and Wright and Wright (1949). General descriptions appear in the following: Ashton and Ashton (1988), Barker (1964), Bartlett and Bartlett (1998), Behler and King (1979), Carr (1940b), Conant and Collins (1991), Dickerson (1907), Dundee and Rossman (1989), Fanning (1966), Gibbons and Semlitsch (1991), Holman (2003), Martof et al. (1980), Mount (1975), and Wever (1985). A description of the



Map. Distribution of *Pseudacris ornata*. The circle indicates the type-locality, dots other records. The stars indicate fossil records.

ear appears in Wever (1985).

• ILLUSTRATIONS. Color photographs and illustrations of **adults** appear in Ashton and Ashton (1988), Bartlett (1994), Bartlett and Bartlett (1998), Behler and King (1979), Carmichael and Williams (2000), Cochran (1961), Conant and Collins (1991), Dundee and Rossman (1989), Gregoire (2005), Holman (2003), Jensen (2008), Leviton (1972), Martof et al. (1980), Moler (1983), Palis (1995), Reichling (2008), and Zim and Smith (1956). Gregoire (2005) and Jensen (2008) also provide color photographs of **tadpoles**. Black-and-white photographs or illustrations are as follows: **adults** (Barker 1964; Harper 1931, 1937; Mount 1975; Murphy 1979; Obst et al. 1988; Wright 1932; Wright and Wright 1949), **breeding adults** (Travis 2006), **electron micrograph of a tadpole labial tooth** (Altig and Pace 1974), **habitat** (Harper 1937), **hybrids** (Mecham 1957, 1965), and **karyotype** (Wiley 1982). A line drawing of an egg is provided by Livezey and Wright (1947). Altig (1971) provided two tadpole line drawings, one a lateral view and the other a ventral view of the oral disc. Gaudin (1969, 1974) provided a line drawing of dorsal and ventral views of the skull. Gaudin (1969) also provided line drawings of the pectoral girdle. Line drawings of the right ilium and ethmoid are found in Chantell (1968). Holman (2003) provided line drawings of the right ilium, right scapula, and right humerus.

• DISTRIBUTION. This is an Atlantic Coastal Plain species, and can be found from eastern North Carolina south to central Florida, and west to extreme southeast Louisiana. Distribution maps are provided by Ashton and Ashton (1988), Bartlett and Bartlett (1998), Behler and King (1979), Conant and Collins (1991), Duellman (1999), Dundee and Rossman (1989), Gaudin (1969), Harper (1937), Jensen (2008), Martof et al. (1980), Mount (1975), Murphy (1979), Porter (1972), and Wright and Wright (1949).

• FOSSIL RECORD. Pleistocene (Rancholabrean) fossils of *P. ornata* have been found at the Arredondo Site, Alachua County, Florida (Holman 1995, 2003; Lynch 1965; Sanchiz 1998). The Isle of Hope Site in Chatham County, Georgia, has also produced *P. ornata* fossils (Holman 2003; Hulbert and Pratt 1998). Russell et al. (2009) placed this record in the context of a warm Late Pleistocene climate in the southeastern United States.

• PERTINENT LITERATURE. References are listed by primary topic: **activity** (Gibbons and Bennett 1974; Semitsch et al. 1996), **anatomy and**

morphology (Burger and Snodgrass 2000; Chantell 1968; Gaudin 1969, 1973, 1974; Goin 1958; Holman 1959; Hunsaker and Johnson 1959; Liu 1935; Mittleman and List 1953; Paukstis and Brown 1987, 1991), **behavior** (Doherty and Gerhardt 1984; Hailman and Jaeger 1974; Jaeger and Hailman 1973; Pechmann and Semlitsch 1986), **capture methods** (Enge 2001; Gibbons and Semlitsch 1981), **checklists and similar compendia** (Banks et al. 1987; Cliburn 1970; Collins and Taggart 2002; Cope 1875; Crother 2000; Frank and Ramus 1995; Frost 1985; Luhring 2007; Schmidt 1953; Van Hyning 1933; Yarrow 1882), **color polymorphism** (Blouin 1989a,b; Hoffman and Blouin 2000; Travis and Trexler 1984), **conservation and management** (Cromer et al. 2002; Daszak et al. 2005; Foley 2000; Gibbons et al. 2006; Hanlin et al. 2000; Hayes and Steidl 1997; Jensen 2005; Means et al. 2004; Millsap et al. 1990; Owens et al. 2008; Palis and Aresco 2007; Pechmann et al. 1991; Reed and Blaustein 1995; Moseley et al. 2003; Semlitsch and Bodie 2003; Todd et al. 2009), **ecology and natural history** (Alford 1981, 1986; Allen 1932; Ashton and Ashton 1977; Brandt 1936, 1953; Brown and Means 1984; Caldwell 1987; Carr 1940a,b; Cloninger and Camper 2005; Corrington 1929; Dodd et al. 2007; Dorcas et al. 2006; Eason and Fauth 2001; Gibbons and Coker 1978; Harper 1937; Jobson 1940; Liner et al. 2008; Littlejohn 1958; Means and Campbell 1981; Neill 1952; Pechmann and Semlitsch 1986; Pechmann et al. 1989, 1991, 2001; Richmond 1968; Schurbon 2000; Schurbon and Fauth 2003, 2004; Schwartz 1957; Semlitsch et al. 1996; Snodgrass et al. 2000; Smith et al. 2006; Todd and Winne 2006; Trauth 1982; Tuberville et al. 2005; Viosca 1938), **evolution and phylogeny** (Brandt and Walker 1933; Cocroft 1994; Cocroft and Ryan 1995; da Silva 1997; Faivovich et al. 2005; Hedges 1986; Highton 1991; Jameson and Richmond 1971; Lemmon 2007; Lemmon et al. 2007a,b; Maxson and Wilson 1975; Means and Simberloff 1987; Moriarty and Cannatella 2004; Olalla-Tárraga and Rodríguez 2007; Paukstis and Brown 1987, 1991; Smith et al. 2005; Wiens et al. 2005; Yeh 2002), **genetics** (Bachmann et al. 1966; Bachmann and Cowden 1967; Degner et al. 2009; Goin et al. 1968; Green and Sessions 1991; Schmid 1978; Wiley 1982), **key - adults** (Brown 1956; Burt 1938; Carr 1940b; Chermock 1952; Dickerson 1907; Dundee and Rossman 1989; Gibbons and Semlitsch 1991; Lohoefener and Altig 1983; Mount 1975; Powell et al. 1998), **key - eggs** (Brown 1956; Livezey and Wright 1947), **key - tadpoles** (Altig 1970; Brown 1956; Chermock 1952; Dundee and Rossman 1989; Fanning 1966; Gibbons and Semlitsch 1991; Lohoefener and Altig 1983; Mount 1975; Orton 1952; Travis 1981), **parasitism** (Robinson 1954; Walton 1946), **physiology** (Harkey and Semlitsch 1988; Warner and Dunson 1998), **predation** (Depkin et al. 1992), **reproduction** (Blair 1958a,b, 1962; Blair and Littlejohn 1960; Gerhardt 1973; Martof 1961; Mecham 1957, 1959, 1965; Neill 1957; Sasa et al. 1998; Sekerak et al. 1996), **tadpole descriptions** (Altig 1971; Altig and Pace 1974; Carr and Altig 1992), **vocalization** (Blair 1958a,b,c; Blair and Littlejohn 1960; Brown and Means 1984; Cocroft and Ryan 1995; Gerhardt 1973; Martof 1961; Moler 1983; Palis 1995; Pinkowski 1993; Thompson and Martof 1957).

• ETYMOLOGY. The specific epithet *ornata* is derived from Latin and means “decorated” or “ornate”, in reference to the dorsal markings seen on this frog.

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